

# Oliver Graudejus, Ph.D

Department of Chemistry and Biochemistry, Center for Adaptive Neural Systems  
Interdisciplinary Science and Technology Building 1  
Arizona State University  
Tempe, AZ 85287

E-mail: [oliver.graudejus@asu.edu](mailto:oliver.graudejus@asu.edu) Phone: 609-532-9744

---

## EDUCATION

*Ph.D. in Chemistry and Minor in Biology*

1992 to 1996 Justus Liebig-Universität Gießen, Germany  
Advisor: Prof. B. G. Müller

*Diploma in Chemistry*

1987 to 1992 Justus Liebig-Universität Gießen, Germany  
Advisor: Prof. B. G. Müller

## EMPLOYMENT

*Arizona State University, Tempe AZ*

2008 to present Associate Research Professor, Center for Adaptive Neural Systems

- Developed a biomimetic pressure sensor with mechanical properties akin to human skin
- Initiated interdisciplinary team to develop a flexible memristor for adaptive networks

2009 to present Faculty Associate, Department of Chemistry

- Taught General Chemistry, Organic Chemistry and Analytical Chemistry courses

*Princeton University, Department of Electrical Engineering, Princeton NJ*

2006 to 2009 Research Scholar (Prof. S. Wagner's group) supported by NJCST, NIH, NJCBIR

- Successfully produced functional prototypes of stretchable microelectrode arrays (SMEAs) for soft interfaces with neural tissue
- Demonstrated the capability of SMEAs to record and stimulate action potentials of cultured hippocampal tissue slices under bi-axial strain of up to 13%
- Demonstrated that hippocampal tissue slices can be stretched when grown on SMEAs, thus providing a new tool for research on traumatic brain injury (collaboration with B. Morrison, Biomedical Engineering, Columbia University)

*Novellus Systems, Inc., San Jose CA*

2004 to 2006 Key Account Technologist: PVD and ALD technology

- Managed European customers for PVD business (Inova platform) for Ta(N) barrier and Cu seed deposition processes
- Demonstrated benefits of ion assisted Atomic Layer Deposition (iALD) technology

2000 to 2004 Key Account Technologist: CVD technology

- Resolved major technical issues (e.g., gapfill and plasma damage) with a high density plasma (HDP) CVD deposition process for American, Asian and European customers
- Strengthened business position at existing customers and gained new customers
- Improved gapfill and particle performance resulting in business exceeding \$20 million

1999 to 2000 Process Engineer: CVD technology

- Developed a new CVD-based phosphorus-doped silicon glass (PSG) deposition process for pre-metal dielectric applications to a level required for IC manufacturing

*University of California, Department of Chemistry, Berkeley CA*

1996 to 1999 Postdoctoral Researcher (Prof. N. Bartlett's group)

- Developed room temperature synthesis of novel, moisture and air sensitive fluorides in high oxidation states

## TEACHING EXPERIENCE

- 2009-present *Arizona State University, Tempe AZ*  
Instructor for Organic Chemistry (CHM231+233, F2009, S2010, F2010, S2012)
- Taught elementary principles of Organic Chemistry to students with majors in Biological, Environmental, and Nutritional Science, Nursing, and Engineering (CHM231), and general Organic Chemistry to pre-med and pre-dental students (CHM233)
  - Used Blackboard as interactive electronic learning tool, and Turningpoint clickers for in class feedback and extra credits
- Instructor for Analytical Chemistry (CHM325+326, summer 2010, 2011, F2011)
- Taught principles of Analytical Chemistry and statistical data analysis to students with majors in Biology, Engineering, and Chemistry
  - Supervised laboratory activities
- Instructor for General Chemistry (CHM113+114, F2010, S2011, F2011, S2012)
- Taught general principles of chemistry to engineering students
- 2007 *Princeton University, Princeton NJ*  
Instructor for Integrated Circuit Fabrication course
- Taught principles of microfabrication to graduate and undergraduate students
  - Supervised laboratory activities
  - Mentored undergraduate student's in research projects
- 1999 *University of California, Berkeley CA*  
Teaching Assistant for General Chemistry
- Taught General Chemistry to undergraduate students in small groups
  - Supervised laboratory sessions
- 1992 to 1996 *Justus von Liebig Universität Giessen, Germany*  
Teaching Assistant and Assistant Instructor for Inorganic Chemistry
- Taught privately organized classes in Organic and Inorganic Chemistry
- 1983 to 1985 *Tilemannschule, Limburg, Germany (high school)*
- Tutored French and chemistry to eighth and ninth graders

## PATENTS

*Phosphorus-doped silicon dioxide process to customize contact etch profiles*; US Patent 7,064,087 issued June 2006

## AWARDS AND HONORS

- 2012 Best Paper of 2011 Award from the Journal of Electronic Materials
- 2005 Promotion to Key Account Technologist, Novellus Systems
- 2003 Promotion to Senior Engineer, Novellus Systems
- 2002 Outstanding Performance Award for the resolution of plasma damage issues during CVD of dielectrics in a high density plasma (HDP) reactor, Novellus Systems
- 2002 Outstanding Performance Award for winning the Infineon 300 mm HDP business, Novellus Systems
- 2001 Outstanding Performance Award for the successful development and productization of a HDP based PSG process, Novellus Systems
- 2000 Award for resolving production issues associated with high Phosphorous content in the HDP PSG process, Cypress Semiconductor
- 1996 Alexander von Humboldt Fellowship award
- 1986 Selected for a seminar from the "Stiftung des Deutschen Volkes"
- 1986 Best Chemistry Student Award at high school (Tilemannschule Limburg)
- 1985 Award for outstanding results at the "International Chemistry Olympiad"

## **SPECIALIZED TRAINING**

### Neuroscience

- Neuroscience Laboratory Course (MOL548) - Princeton University, Spring 2008
- Implantable Neuroprosthetics: Technologies and Techniques - Center for Neural Communication Technology, University of Michigan, June 2007

### Microfabrication

- Introduction to Microfabrication lab course - Princeton University, Department of Electrical Engineering, June 2006
- Advanced Silicon Processing - Stanley Wolf, Moshe Prell, Anthony Lochtefeld, May 2005
- Silicon Processing for the VLSI Era - Stanley Wolf, Moshe Prell, Jerry Healey, Simon A. Prussin, Robert B. Simonton, March 2001
- Process Integration for Submicron IC Technologies - Stanley Wolf, Jerry Healey, Nick Kepler, Robert B. Simonton, March 2000
- Novellus Concept Two: SPEED Process Module Maintenance - Novellus Systems, January 2000
- Novellus Concept Two: System Operations - Novellus Systems Inc., October 1999

### Experimental Design and Data Analysis

- Design of Experiment (DoE) - Novellus Systems, March 2002
- Rietveld Method Short Course - Angus Wilkinson, June 1999

## **LANGUAGE AND OTHER SKILLS**

- Fluent in speaking and writing in German, English and French; conversational level in Italian
- Operate of advanced, automated microfabrication processing equipment
- Design and write photomasks using L-edit and a Heidelberg Laserwriter
- Operate of FEI XL30 SEM
- Used software to solve crystal structures from X-ray (Shell) and Synchrotron (Rietveld Method) radiation diffraction data
- Minor in Biology
- Microelectrodes for *in vivo* and *in vitro* recording of extracellular neural activity

## **AD HOC REVIEWER**

- Journal of the Electrochemical Society
- IEEE Transactions on Biomedical Engineering
- Materials Today
- Nature Methods
- Journal of Physical Chemistry

## INVITED TALKS AND PRESENTATIONS (2007 TO PRESENT )

1. Stretchable Microelectrodes for Biomedical Applications, Tsinghua University, Beijing/China, 21 December 2011
2. Understanding the fabrication process: Keys to cost effective, reproducible, and reliable stretchable neural interfaces, Materials Research Society Meeting, Symposium R3.1, *Compliant Electronics and Photonics*, Boston/MA, November 2011
3. Controlling the morphology of gold films on polydimethylsiloxane (PDMS), Materials Research Society Meeting, Symposium JJ7.1, *Stretchable Electronics and Conformal Biointerfaces*, San Francisco/CA, April 2010
4. Novel biomimetic electronic interfaces: Sensing and stimulating, 2<sup>nd</sup> *International Workshop on Flexible & Stretchable Electronics*, Keynote Speaker, Ghent/Belgium, November 2009
5. Tissue-like electronic interfaces, 6<sup>th</sup> *Annual New Jersey Biomedical Engineering Showcase*, Keynote Speaker, Newark/NJ, March 2009
6. Stretchable microelectrodes for biomedical applications, *University of Arizona*, Tempe/AZ, November 2008
7. Stretchable microelectrodes as novel neural interfaces, *University of Louisville*, Louisville/KY, January 2008
8. Stretchable microelectrodes for biomedical applications, *Colby College*, Waterville/ME, December 2007
9. Flexible, stretchable and conformal neural interfaces for neural stimulation and recording, *Jacobs University*, Bremen/Germany, November 2007
10. Encapsulating and patterning elastic thin film interconnects, *PRISM/PCCM University-Industry Research Symposium*, Princeton University, Princeton/NJ, March 2007
11. Stretchable microelectrode arrays – application and fabrication, *Johnson & Johnson Center for Biomaterials and Advanced Technologies (CBAT)*, Somerville/NJ, March 2007
12. Flexible electronic surfaces for biomedical applications, *Innovation Forum*, Princeton University, Princeton/NJ, February 2007

## PUBLICATIONS ON STRETCHABLE ELECTRONICS

### *Refereed Journal Publications*

1. **O. Graudejus**, Z. Jia, T. Li, S. Wagner, Size dependent rupture strain of elastically stretchable metal conductors, *Scripta Materialia*, 2012, in press
2. **O. Graudejus**, B. Morrison, C. Goletiani, Z. Yu, S. Wagner, Encapsulating elastically stretchable neural interfaces: yield, resolution, and recording/stimulation of neural activity, *Advanced Functional Materials*, 2012, 22, 640-651
3. J. Jones, **O. Graudejus**, S. Wagner, Elastically stretchable insulation and bi-level metallization and its application in a stretchable RLC circuit, *Journal of Electronic Materials*, 2011, 40(6), 1335-1344.
4. **O. Graudejus**, P. Görrn, S. Wagner, Controlling the morphology of gold films on poly(dimethylsiloxane), *ACS Applied Materials & Interfaces*, 2010, 2(7), 1927-1933
5. S. P. Lacour, S. Benmerah, E. Tarte, J. FitzGerald, J. Serra, S. McMahon, J. Fawcett, **O. Graudejus**, Z. Yu, B Morrison, Flexible and stretchable micro-electrodes for in vitro and in vivo neural interfaces, *Medical & Biological Engineering Computation*, 2010, 48(10), 945-954 (Special Issue)
6. Z. Yu, **O. Graudejus**, C. Tsay, S. P. Lacour, S. Wagner, B. Morrison, Monitoring hippocampus electrical activity in vitro on an elastically deformable microelectrode array, *Journal of Neurotrauma*, 2009, 26(7), 1135-1145
7. **O. Graudejus**, Z. Yu, J. Jones, B. Morrison III, S. Wagner, Characterization of an elastically stretchable microelectrode array and its application to neural field potential recordings, *Journal of the Electrochemical Society*, 2009, 156(6) P85-P94

### *Refereed Conference Publications*

1. Z. Yu, **O. Graudejus**, S.P. Lacour, S. Wagner, B. Morrison III: Neural sensing of electrical activity with stretchable microelectrode arrays, *Conf. Proc. IEEE Eng. Med. Biol. Soc.* 1:4210 (2009)
2. **O. Graudejus**, C. Tsay, Z. Yu, B. Morrison, S. P. Lacour, S. Wagner: Advances in encapsulating elastically stretchable microelectrode arrays, *Materials Research Society Symposium Proceedings*, Vol. 1009E, U04.2 (2007)

- C. Tsay, **O. Graudejus**, S. Wagner, S. P. Lacour, B. Morrison: Morphology and stretchability of thin film metal conductors on elastomeric substrates, *Materials Research Society Symposium Proceedings*, Vol. 1009E, U06.3-03 (2007)
- Z. Yu, **O. Graudejus**, C. Tsay, S.P. Lacour, S. Wagner, B. Morrison: Stretchable microelectrode array: A potential tool for monitoring neuroelectrical activity during drain tissue deformation, *Journal of Neurotrauma*, 24(7), 1278, P200 (2007)

#### OTHER REFEREED JOURNAL PUBLICATIONS

- H. Fitz, B. G. Müller, **O. Graudejus**, N. Bartlett, Einkristalluntersuchungen an  $\text{LiMF}_6$  ( $M=\text{Rh, Ir}$ ),  $\text{Li}_2\text{RhF}_6$  und  $\text{K}_2\text{IrF}_6$  (Single crystal investigations on  $\text{LiMF}_6$  ( $M=\text{Rh, Ir}$ ),  $\text{Li}_2\text{RhF}_6$  and  $\text{K}_2\text{IrF}_6$ ), *Zeitschrift für anorganische und allgemeine Chemie* 2002, 628(1), 133-137
- O. Graudejus**, A. P. Wilkinson, L. C. Chacón, N. Bartlett, M-F interatomic distances and effective volumes of second and third transition series  $\text{MF}_6^-$  and  $\text{MF}_6^{2-}$  anions, *Inorganic Chemistry* 2000, 39(13), 2794-2800
- O. Graudejus**, A. P. Wilkinson, N. Bartlett, Structural features of  $\text{Ag}[\text{AuF}_4]$  and  $\text{Ag}[\text{AuF}_6]$  and the structural relationship of  $\text{Ag}[\text{AgF}_4]_2$  and  $\text{Au}[\text{AuF}_4]_2$  to  $\text{Ag}[\text{AuF}_4]_2$ , *Inorganic Chemistry* 2000, 39(7), 1545-1548
- L. Graham, **O. Graudejus**, N.K. Jha, N. Bartlett, Concerning the nature of  $\text{XePtF}_6$ , *Coordination Chemistry Reviews* 2000, 197, 321-334
- C. Shen, B. Zemva, G.M. Lucier, **O. Graudejus**, J.A. Allman, N. Bartlett, Disproportionation of Ag(II) to Ag(I) and Ag(III) in fluoride systems and the synthesis and structure of  $(\text{AgF}^+)_2\text{AgF}_4\text{MF}_6^-$  salts ( $M=\text{As, Sb, Pt, Au, Ru}$ ), *Inorganic Chemistry* 1999, 38(20), 4570-4577
- O. Graudejus**, S.H. Elder, G. M. Lucier, C. Shen, N. Bartlett, Room temperature synthesis of  $\text{AuF}_6^-$  and  $\text{PtF}_6^-$  salts,  $\text{Ag}^+\text{AuF}_6^-$ ,  $\text{Ag}^{2+}\text{PtF}_6^{2-}$  and  $\text{Ag}^{2+}\text{PdF}_6^{2-}$ , and an estimate for  $E(\text{MF}_6^-)$   $M=\text{Pt}$  and  $\text{Pd}$ , *Inorganic Chemistry* 1999, 38(10), 2503-2509
- H. Wang, P. Ge, C. G. Riordan, S. Brooker, C. G. Woomer, T. Collins, C. A. Melendres, **O. Graudejus**, N. Bartlett, S. P. Cramer, Integrated X-ray L absorption spectra. Counting holes in Ni complexes, *The Journal of Physical Chemistry B* 1998, 102(42), 8343-8346
- O. Graudejus**, B. G. Müller, Zur Kenntnis von  $\text{NiPtF}_6$  und  $\text{CdPtF}_6$  (Annotation to compounds  $\text{NiPtF}_6$  and  $\text{CdPtF}_6$ ), *Zeitschrift für anorganische und allgemeine Chemie* 1996, 622(10), 1711-1714
- O. Graudejus**, B. G. Müller,  $\text{Ag}^{2+}$  in trigonal-bipyramidal Umgebung: Neue Fluoride mit zweiwertigem Silber:  $\text{AgM}_3^{\text{II}}\text{M}_3^{\text{IV}}\text{F}_{20}$  ( $M^{\text{II}}=\text{Cd, Ca, Hg}$ ;  $M^{\text{IV}}=\text{Zr, Hf}$ ) ( $\text{Ag}^{2+}$  in trigonal-bipyramidal surrounding: New Fluorides with divalent Silver:  $\text{AgM}_3^{\text{II}}\text{M}_3^{\text{IV}}\text{F}_{20}$  ( $M^{\text{II}}=\text{Cd, Ca, Hg}$ ;  $M^{\text{IV}}=\text{Zr, Hf}$ )), *Zeitschrift für anorganische und allgemeine Chemie* 1996, 622(9), 1549-1556
- O. Graudejus**, B. G. Müller, Neue Fluoride  $\text{M}^{\text{III}}\text{M}^{\text{IV}}\text{F}_7$  mit  $M^{\text{III}}=\text{Se, Tl}$  und  $M^{\text{IV}}=\text{Sn, Pb, Pt}$  (New fluorides  $\text{M}^{\text{III}}\text{M}^{\text{IV}}\text{F}_7$  with  $M^{\text{III}}=\text{Se, Tl}$  and  $M^{\text{IV}}=\text{Sn, Pb, Pt}$ ), *Zeitschrift für anorganische und allgemeine Chemie* 1996, 622(9), 1601-1608
- O. Graudejus**, B. G. Müller, Zur Kristallstruktur von  $\text{O}_2^+\text{MF}_6^-$  ( $M=\text{Sb, Ru, Pt, Au}$ ) (On the crystal structure of  $\text{O}_2^+\text{MF}_6^-$  ( $M=\text{Sb, Ru, Pt, Au}$ )), *Zeitschrift für anorganische und allgemeine Chemie* 1996, 622(6), 1076-1082
- O. Graudejus**, B. G. Müller, Zur Kristallstruktur von  $\text{La}[\text{AuF}_4]_3$ , dem Anfangsglied der Reihe  $\text{M}[\text{AuF}_4]_{3-x}\text{F}_x$  ( $x=0, 0,5$  und  $1$ ) (On the Crystal Structure of  $\text{La}[\text{AuF}_4]_3$ , the final link in the series  $\text{M}[\text{AuF}_4]_{3-x}\text{F}_x$  ( $x=0, 0,5$  und  $1$ )), *Zeitschrift für anorganische und allgemeine Chemie* 1996, 622(1), 187-190
- O. Graudejus**, F. Schrötter, B. G. Müller, R. Hoppe, Zur Kristallstruktur von  $\text{SmZrF}_7$  mit einem Anhang über  $\text{EuSnF}_7$  und  $\text{YSnF}_7$  (On the crystal structure of  $\text{SmZrF}_7$  with an appendix on  $\text{EuSnF}_7$  and  $\text{YSnF}_7$ ), *Zeitschrift für anorganische und allgemeine Chemie* 1994, 620(5), 827-832

## CONFERENCE PRESENTATIONS (2007 TO PRESENT)

1. S. Wagner, W. Cao, P. Görrn, **O. Graudejus**, Elastically stretchable metallization for interconnects, Materials Research Society Meeting, Symposium T3.1, *Large-area processing and patterning for active optical and electronic devices III*, Boston/MA, November 2011 (invited)
2. W. Cao, **O. Graudejus**, J. Jones, S. Wagner, Electrical, mechanical and thermal studies, Material Research Society Meeting, Symposium JJ1.2, *Stretchable Electronics and Conformal Biointerfaces*, San Francisco, April 2010
3. C. Goletiani, Z. Yu, **O. Graudejus**, W. Cao, S. Wagner, B. Morrison, The stretchable microelectrode array: Recent progress on a compliant interface for brain tissue, Material Research Society Meeting, Symposium JJ2.2, *Stretchable Electronics and Conformal Biointerfaces*, San Francisco, April 2010
4. P. Görrn, W. Cao, **O. Graudejus**, S. Wagner, Wrinkling and micro-cracking of gold on PDMS, *9<sup>th</sup> Annual Flexible Electronics and Displays Conference*, Phoenix, February 2010
5. W. Cao, **O. Graudejus**, J. Jones, S. Wagner, Electrical, mechanical and thermal studies on stretchable electrodes – potential application for e-skin, *9<sup>th</sup> Annual Flexible Electronics and Displays Conference*, Phoenix, February 2010
6. Z. Yu, **O. Graudejus**, S. Lacour, S. Wagner, B. Morrison, Neural sensing of electrical activity with stretchable microelectrode arrays, Paper FrE10.3, *31<sup>st</sup> Annual International IEEE EMBS Conference*, Minneapolis (Minnesota), September 2009 (invited)
7. S. Wagner, K. H. Cherenack, B. Hekmatshoar, P. Mandlik, L. Han, **O. Graudejus**, J. Jones, W. Cao, J.C. Sturm, Flexible and stretchable electronic surfaces, Session 11.2, *International Display Research Conference EuroDisplay 2009*, Rome, September 2009 (invited)
8. W. Cao, **O. Graudejus**, J. Jones, S. Wagner, Mechanical and thermal stretching of fully encapsulated elastomeric conductors, Session U9, *Electronic Materials Conference*, University Park (Pennsylvania), June 2009
9. J. Jones, **O. Graudejus**, W. Cao, S. Wagner, Two-level stretchable conductors on elastomeric substrates, Session U7, *Electronic Materials Conference*, University Park (Pennsylvania), June 2009
10. W. Cao, J. Jones, **O. Graudejus**, S. Wagner, Highly stretchable fully encapsulated elastomeric conductors, Material Research Society Meeting, Symposium PP 14.3, *Materials and Devices for Flexible and Stretchable Electronics*, San Francisco, April 2009
11. The critical strain of elastomeric metal interconnects, Material Research Society Meeting, Symposium PP 15.6, *Materials and Devices for Flexible and Stretchable Electronics*, San Francisco, April 2009
12. **O. Graudejus**, J. Jones, W. Cao, S. Wagner, Multi-layered Encapsulated stretchable conductors on PDMS substrates, *8<sup>th</sup> Annual Flexible Electronics and Displays Conference*, Phoenix, February 2009
13. W. Cao, **O. Graudejus**, J. Jones, S. Wagner, Processing of vias in elastically stretchable microelectrode arrays, Session 23.21, *8<sup>th</sup> Annual Flexible Electronics and Displays Conference*, Phoenix, February 2009
14. **O. Graudejus**, J. Jones, W. Cao, S. Wagner, The critical strain of elastically stretchable thin film metal interconnects, Session 23.23, *8<sup>th</sup> Annual Flexible Electronics and Displays Conference*, Phoenix, February 2009
15. **O. Graudejus**, J. Jones, S. Wagner, Improving the adhesion of photopatternable silicone on poly dimethyl siloxane (PDMS) to encapsulate elastically stretchable microelectrode arrays, *The Symposium on Polymers for Microelectronics*, Wilmington, May 2008
16. **O. Graudejus**, J. Jones, Z. Yu, B. Morrison, S. Wagner, Application of photopatternable silicone to encapsulate elastically stretchable microelectrode arrays: Benefits and issues, Symposium M 4.2, *Materials and Technology for Flexible, Conformable, and Stretchable Sensors and Transistors*, MRS, San Francisco, April 2008
17. J. Jones, C. Tsay, **O. Graudejus**, P. Mandlik, S. Wagner, Electrical conductance of narrow, stretchable Interconnects on elastomeric substrates with randomly nano-patterned surfaces, Material Research Society Meeting, Symposium N6.7, *Materials and Processes for Advanced Interconnects for Microelectronics*, San Francisco, April 2008
18. Z. Yu, **O. Graudejus**, C. Tsay, S. P. Lacour, S. Wagner, B. Morrison, Stretchable microelectrode arrays: Stimulating and recording neural activity during deformation, Material Research Society Meeting,

Symposium M 12.3, *Materials and Technology for Flexible, Conformable, and Stretchable Sensors and Transistors*, San Francisco, April 2008

19. I. Hu, **O. Graudejus**, J. Jones, M. Kutzinger, B. Firestein, S. Wagner, Growth of dissociated spinal cord cultures on stretchable microelectrode arrays, Material Research Society Meeting, Symposium M 15.1, *Materials and Technology for Flexible, Conformable, and Stretchable Sensors and Transistors*, San Francisco, April 2008
20. **O. Graudejus**, J. Jones, I. Hu, S. Wagner, Improving the resolution of the encapsulation process for elastically stretchable thin film interconnects, *7<sup>th</sup> Annual Flexible Electronics and Displays Conference*, Phoenix, January 2008
21. Z. Yu, **O. Graudejus**, C. Tsay, S. P. Lacout, S. Wagner, B. Morrison III, Stretchable microelectrode array-based in vitro platform for the study of traumatic brain injury; *Neuroscience*, program # 261.5, San Diego, 2007
22. Z. Yu, **O. Graudejus**, C. Tsay, S. P. Lacour, S. Wagner, B. Morrison III, Stretchable microelectrode array: A potential tool for monitoring neuroelectrical activity during brain tissue deformation, *25<sup>th</sup> Annual National Neurotrauma Society Symposium*, poster # 200, Kansas City, July 2007
23. **O. Graudejus**, C. Tsay, S. Wagner, Flexible electronic surfaces for biomedical applications, *New Jersey Commission for Spinal Cord Research*, Camden, April 2007
24. **O. Graudejus**, C. Tsay, Z. Yu, B. Morrison, S. P. Lacour, S. Wagner, Advances in encapsulating elastically stretchable microelectrode arrays, Symposium U4.2, *Advanced Materials for Neuroprosthetic Interfaces*, MRS, San Francisco, April 2007
25. C. Tsay, **O. Graudejus**, S. Wagner, S. P. Lacour, B. Morrison, Morphology and stretchability of thin film metal conductors on elastomeric substrates, Material Research Society Meeting, Symposium U6.3, *Advanced Materials for Neuroprosthetic Interfaces*, San Francisco, April 2007
26. Z. Yu, **O. Graudejus**, C. Tsay, S. P. Lacour, S. Wagner, B. Morrison, Stretchable microelectrode arrays: Potential for a highly compliant neural interface, Material Research Society Meeting, Symposium U9.2, *Advanced Materials for Neuroprosthetic Interfaces*, San Francisco, April 2007
27. J. Jones, S. P. Lacour, **O. Graudejus**, P. Mandlik, S. Wagner, Stretchable interconnects for microelectronics, Material Research Society Meeting, Symposium B5.4, *Materials, Processes, Integration and Reliability in Advanced Interconnects for Micro- and Nanoelectronics*, San Francisco, April 2007
28. **O. Graudejus**, C. Tsay, S. Wagner, Encapsulating and patterning elastic thin film interconnects, *6<sup>th</sup> Annual Flexible Electronics and Displays Conference*, Phoenix, February 2007